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Citation for the published paper:

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The World Economy, 2005, Vol. 28, Issue 4, pp. 595-606

URL: <http://dx.doi.org/10.1111/j.1467-9701.2005.00693.x>

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Can Japan Make a Comeback?

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2004-10-21

JEL-codes: O53, E52, E65.

Keywords: Japanese economic model, macroeconomic imbalance, liquidity trap, economic policy.

Running title: Can Japan Make a Comeback?

1. INTRODUCTION[#]

After being the best performer in the OECD during the preceding forty years, Japan has experienced economic stagnation since the beginning of the 1990s. What has happened to the Japanese economy? Can it make a comeback as a fast-growing economy? What is required in terms of economic policy?

Japan is the second largest economy in the world, it is the largest or second largest importer of most raw materials, and it owns more foreign assets than any other country. What happens to the Japanese economy is therefore of great importance, not only for the Japanese but also for the entire world.

2. SHORT HISTORY OF THE JAPANESE MODEL¹

Japan represents a specific development model. It has been highly regulated at least since the start of the Edo period in the 17th century, when the government set up public administration systems that imposed a lot of controls. One aim at that time was to isolate the country from the rest of the world, and to enter or leave the country was even for a time punishable by death! In the mid-19th century foreigners forced the country open, and this initiated a change from feudalism to a more market-oriented system.

[#] Thanks for comments are due to Rick Wicks, Dick Durevall, and an anonymous referee who read the first draft of the paper.

¹ This section is based on Lambert (2001).

From 1868 the new Meiji government attempted to introduce modern technology, but by the late 1880s government's resources had become overextended, so the government decided to sell off certain firms to groups that had backed the government. The close links that were established between the government and big business at this time still persist. Initially the Meiji government was bound by international agreements to keep tariffs low, but in 1911 the country got full tariff-autonomy. Higher tariffs were then introduced to protect domestic industry.

In the 1930s and 1940s Japanese firms were forced to adjust production according to national defence needs, while the country fought wars in China and then throughout Asia. In 1941 a formal control organisation was set up for all vital industries. This was first under the leadership of a top executive from private industry, but eventually the organisation got a full time president.

The post-war American occupation authorities tried to change the economic structure through anti-trust legislation and dissolving *zaibatsu* (conglomerates). Still, Japanese bureaucrats soon regained their power, and the influence of the economics ministries was hardly affected. The *zaibatsu* dissolution programme had mixed results; *keiretsu* business-groups rose from the remains and are still powerful.

The first post-war years were very difficult for Japan, but from the Korean War and the peace treaty of 1951 onwards, growth was fast. Japan protected its domestic markets, while it instituted measures to promote private investment and exports. The labour-force worked hard and incomes were rising rapidly. The Liberal Democratic Party (LDP) was

formed in 1955. With a social pact between politicians, the bureaucracy, and big business, the LDP government then remained in power for the next 38 years.

3. THE GROWTH COLLAPSE

During most of the post-war period Japan has been described as a miracle economy, growing extremely fast until the first oil crisis in 1973 (Table 1). . The situation then deteriorated due to the collapse of the Bretton Woods system, the oil crisis, and the world recession, but even during the period 1973 to 1990 growth was still faster than in other OECD countries. Since then the economy has virtually stagnated, however.

Table 1: Growth of GDP 1950-2000 (% per year)

	1950-73	1973-1990	1990-2000
Japan	8.8	3.8	1.3
USA	3.6	2.9	3.4
Western Europe	4.9	2.2	2.0

What caused the growth collapse? During the 1980s the Japanese economy experienced fast growth, but the economy was allowed to overheat, with real-estate speculation combined with a loose lending-policy in the late 1980s. Ito (2003) notes that the regulatory regime was changed in the mid-1980s without the supervisory regime (particularly with regard to real estate transactions) being enhanced. In 1987, capital gains from securities and real-estate transactions were 40 per cent larger than GDP! At the same time the yen/dollar rate fell from 243 in 1985 to 120 in 1987, which made imported goods much more competitive than earlier. In May 1989 the Bank of Japan

started to increase interest rates to dampen the wave of speculation. At the same time there was pressure on Japanese banks to implement the 1988 Basel Capital Accord, which required them to show capital adequacy by maintaining a reserve of 8 per cent on risk-adjusted assets. Lending regulations were finally introduced for real estate in 1990, and a new land-tax was announced. All of this helped to speed up the inevitable burst of the bubble. According to OCED estimates, the collapse caused a wealth-decline equal to two years of GDP. The Nikkei index fell from 38,915 in December 1989 to 14,309 on 18 August 1992 and then fell by another 50 per cent until it reached around 7000 in early 2003. There was thus massive asset-deflation, which in turn led to a banking crisis.²

Growth has been slow since 1991 and in some years even negative, with the economy even entering a period of deflation. By 2003 the price-level had been falling for five years. Employee compensation started falling in the late 1990s, and unemployment has reached 5 per cent, which is very high for Japan. Public debt now exceeds 150 per cent of GDP. The deficit in the 2003/04 budget is expected to be 8 per cent of GDP, and ambitions are rather modest, with the target for 2010 to balance the budget exclusive of interest payments. It may be noted, though, that more than half of the debt is owed to other government institutions, so that the net debt of the government is considerably less (Eggertsson, Woodford, 2003). There are some signs that the economy may finally be on its way to recovery, such as the fact that the Nikkei index has gone from about 7000 in 2003 to well above 10,000 during 2004.

² See Hoshi and Kashyap (2004) for more details.

The debate on the growth-collapse concerns the extent to which the decline depended on temporary negative shocks and macroeconomic imbalances or on deteriorating long-term growth-prospects. It is clear that the period of stagnation was initiated by the bursting of the price-bubbles in shares and land in 1990. The drop in asset-values made firms and individuals poorer and more cautious, and it led to a financial crisis. The Japanese government missed the opportunity in the early 1990s to pursue an aggressive monetary policy that could have prevented the economy from falling into the liquidity trap (Saxonhouse and Stern, 2003). The government was initially not willing to supply resources to clean up the banks, although there have been efforts to address that problem from about 1998. The financial crisis contributed to the sustained deflationary pressure in the economy.

The crisis was aggravated by other factors. During the period 1992-95 the yen appreciated by about 50 per cent, which reduced the competitiveness of the country and hindered an export-led recovery. A premature fiscal tightening and the Asian crisis of 1997-98 stopped the recovery that started in 1996. The Asian countries buy more than a third of Japan's exports, and this trade fell by more than a quarter during 1998. The next recovery started in 2000, but it was cut short by the bursting of the IT-bubble and the recession in the USA, plus a temporary abandonment of the zero-interest policy in August that year. The two recoveries in 1996 and 2000 were thus choked off by policy mistakes and external events (bad luck).

The events on the demand side explain the decline well, but Morana (2004) and others have shown that there was a productivity slowdown in the 1990s. This decline in productivity growth can be seen as the result of the demand side problems, but it may also be due to negative supply shocks and structural factors. Both these types of explanations need to be considered.

4. THE MACROECONOMIC IMBALANCES

The shock of the collapse made expectations more pessimistic, which led to an imbalance between savings and investment-demand. During a long period the Japanese have been saving more than 30 per cent of GDP, which has gone to investment. When domestic investment-demand declined, the excess savings had to find other uses. There are basically two alternatives for private savings. One is to place them abroad and running a current account surplus or they can be used to finance a domestic fiscal deficit. At the end of the 1990s these two uses were respectively absorbing 2 per cent and 6 per cent of GDP, while the savings rate was still close to 30 per cent.

There are obviously limits to how much these uses can absorb. The country has already built up a huge public debt, which makes it hard for the government to continue with large deficits. If the problems were short-term, fiscal expansion could give firms some breathing space. To succeed, this would have to lead to expansion of private demand, but private demand in Japan has so far not responded sufficiently. The reduced taxes have not affected private demand very much, since people have been concerned about job security and their future pensions and medical benefits. People have therefore chosen to save the bulk of their increased disposable incomes. Moreover, much of the extra government

expenditure has been for rather unproductive rural infrastructure-investments, which have not helped to increase output.³

The solution of investing abroad would require a depreciating exchange rate to generate a sufficiently large trade surplus. For Japan this would lead to increased demand in the short term, and its foreign investments would yield higher returns in the long term for the aging population. For the rest of the world it would provide investment resources and contribute to a reduction of real interest rates. Still, it is unlikely that the rest of the world, particularly the USA, is willing to accept an even larger Japanese trade surplus. This might thus be a serious political problem; but this is not the only problem (Krugman, 2000). For a large-enough surplus to emerge, the real exchange rate would have to adjust, possibly beyond the equilibrium exchange rate. But investors are aware that countries cannot run surpluses forever, and that there would eventually have to be adjustments towards equilibrium. So while Japan may in the short run need a very cheap yen to be able to achieve a sufficiently large surplus, international investors expecting the currency to appreciate later would actually hinder such a depreciation of the yen. Yen assets might be attractive even at a zero interest rate, given an expected appreciation later. Recent exchange-rate interventions without sterilization have helped reduce the yen appreciation, but they have not managed to bring about a depreciation against the dollar.

It has been possible to channel an increasing share of savings to financing a fiscal deficit and foreign investments, but it has not been enough to close the ex ante gap between investment-demand and savings. In a closed economy, one would expect that such a gap

³ According to the analysis of Ihori, Nakazato, and Kawade (2003) the increasing public investments in the 1990s crowded out private investment and did not stimulate private consumption much.

would lead to falling interest rates and/or reduced production. In an open economy, on the other hand, one would not expect interest rates to change, but rather the savings-surplus would be channelled abroad if it is possible to create a trade surplus. If the real exchange rate cannot fall enough, one might not succeed in generating an export surplus large enough to close the savings-investment gap. Then the result, even in an open economy, would be a downward adjustment in domestic production. This is probably what has happened in Japan.

5. THE LIQUIDITY TRAP

Japan has experienced an extended period of deflation, which can have several effects that tend to depress an economy.⁴ First, consumers and firms tend to delay purchases, thus reducing aggregate demand. Second, consumer-price deflation triggers asset-price deflation, also with negative demand effects. Third, interest rates become ineffective as a tool, and the real interest rate goes up. Fourth, wage rigidity may hinder adjustment, although that is not such a large problem in Japan, with bonus systems, flexible job assignments, and weak labour unions.

Goyal and McKinnon (2003) and Fukao (2003) argue that the spread in Japanese banks between loan rates and deposit rates in the 1990s was so small that a capital infusion would have failed. Goyal and McKinnon note that Japanese interest rates have moved in

⁴ When there is deflation or disinflation so that prices become lower than expected, there is a negative effect on aggregate demand.

parallel with US rates with a negative differential,⁵ and when US rates came down the Japanese rates were squeezed towards zero and the country was caught in the liquidity trap. With low lending rates and the zero lower bound on deposit rates, profit margins on commercial lending became very low. It was therefore very hard for Japanese banks to recapitalise themselves in this environment, and they would not have been very eager to lend to firms even if the government had injected more money. Instead there was an incentive to shift portfolios away from commercial lending to low-transaction-cost government bonds. Fukao (2003) has an alternative explanation to the low bank profit margins. He argues that they were kept low because government institutions were providing loans at cheap interest rates, and because there were governance problems in the bank due to the very low pressure from the shareholders, largely mutual life-insurance companies. Whatever the explanation, the compressed rates explain the reluctance of Japanese banks to make new loans and their inability to recapitalise themselves.

When the bubble collapsed, the bad debts and insolvencies were not faced up to effectively, since strong measures to clean up the banks, other financial institutions, and industrial corporations would have had negative short-term consequences. The government was not able or willing to take the political costs of such measures. The lack of resolve may well have been due to the consensus character of the Japanese model, which makes it possible for strong vested interests to oppose changes they believe would be costly for them.

⁵ This has been due to decades of Japanese trade surpluses and expectations of a continually appreciating yen.

So Japan got stuck in a liquidity trap. Krugman (1998, 2000) discusses different monetary policy alternatives. The first would be quantitative easing, which means that the government would see to it that the monetary base expands. Unless expectations were affected, this would not be effective: Agents would only change one asset with zero interest against another. Alternative measures could be currency market interventions and purchases of long-term securities. Such interventions can drive the currency and long-term interest rate down, if the assets involved are not perfect substitutes for short-term assets. There should be some effect from such interventions, but how large would it be? Could there be large enough such interventions? It might be necessary for the government to buy a lot of foreign exchange to export enough capital to close the gap, or to buy a lot of domestic bonds. The end result might be that the government would own a lot of foreign assets and domestic bonds. But could this policy shift the economy to a higher equilibrium?

According to Krugman, the preferred strategy would be inflation targeting, which means a credible commitment to future monetary expansion. However, it might be hard to convince the market that the central bank will change its traditional behaviour. The bank would also have to make a sufficiently large shift in its inflation-target. So in the end there may be no easy way out, but Krugman suggests that, in a critical situation, the government should try everything. It actually seems to have tried much of the above, belatedly, but the desired results have not been forthcoming. Krugman's interpretation would be that the central bank and the government have not yet been able to affect the expectations of economic agents. Also Eggertsson and Woodford (2003) emphasize the critical importance for policy to change the expectations of economic agents. They

recommend that the government should try to credibly commit to a policy that aims to achieve a time-varying price-level target. They argue that the policy pursued so far has not changed expectations about future monetary policy of the Bank of Japan.

Svensson (2003) suggests an approach with three ingredients. First the central bank should set an upward-sloping price-level target path. Second, it should bring about an initial depreciation of the yen, followed by further depreciation via a crawling peg mechanism. Third, the government should have an exit strategy with abandonment of the peg in favour of inflation targeting once the initial inflation-target has been reached.

Other similar ideas that have been proposed, such as a tax on money holding (Goodfriend, 2000); a target interest rate on long-term bonds (Clouse et al., 2003); and a combination of fiscal contraction, monetary expansion, and depreciation (McKibbin and Wilcoxon, 1998).

6. THE STRUCTURAL PROBLEMS

Although the growth collapse obviously was started by the bursting of the speculative bubble in 1990, there are authors who argue that the failure of the remedies tried so far is also related to structural problems of the Japanese economy. One “structural” factor that is hard to measure is the fact that, earlier, Japan was catching up with the technologically most advanced countries. By implementing their technologies in a low-cost environment it was possible for Japan to grow faster than the countries on the technology frontier. However, by 1990 Japan itself represented this frontier in many areas and wages had caught up with those in the West, which made it harder to grow faster than other frontier

states. Another problematic factor is the aging of the population; a smaller and smaller fraction of the population is in the labour force, and also this reduces growth potential.

It seems possible that the Japanese institutional structure reduces the scope for private initiative and entrepreneurial activity; that the state interferes too much, and that both the labour market and the goods-market are insufficiently flexible. Porter and Sakakibara (2004) find that competition in Japan is weak in the protected sectors, where Japan is not internationally competitive, while competition is fierce in the sector where Japan has been successful. Still, overall efficiency would probably be significantly improved by competition policy.

Nishimura and Kawamoto (2003) argue that the community-banking model with very stable long-term relationships between firms and their banks was rational and well-performing during the long period of stable growth. The strategy was to keep firms alive even when they were in serious financial difficulties. Their collateral was real estate and shares, and as long as asset prices kept increasing the system of soft disciplinary action by banks worked well, but it was not sustainable once there was asset-deflation. The supervision of the financial system was not strong, which meant that the system was not resilient (Ito, 2003).

Researchers are not in agreement about how much of the decline in growth that can be explained by different factors and what reforms are needed. Yoshino and Sakakibara (2002) argue that macroeconomic measures are insufficient. They therefore argue that what is needed is for the government to undertake further financial reforms, to pursue competition policy, and to reallocate public investment to more productive areas.

Is there any evidence supporting this view? McNelis and Yoshiono (2004) have tried to decipher the message in Japanese inflation dynamics, using a New Keynesian Philips-curve framework. They find that inflation is primarily driven by the growth of bank lending and by the increasing share price index. They interpret these results to mean that, to fight current deflation, the government should try to expand bank lending and stimulate higher share prices. This would require further restructuring of the financial system and, for example, measures that would stimulate pension funds to get involved in the stock market.

7. IMPACTS ON THE JAPANESE MODEL

So what effect has the crisis had on the Japanese model?⁶ Obviously the government eventually decided that it was necessary to reform the economy, and started to do so in the late 1990s. The current LDP Prime Minister Koizumi, who came to power in April 2001, is trying to push the reform agenda more aggressively than earlier leaders did.

The banking crisis reached a climax in 1998, when GDP fell by 2.5 per cent. The bank-bailout required a lot of government funds, and it led to changes in the system of bank oversight. By early 2001 at least 40 financial institutions were in receivership under the Financial Reconstruction Law. Major financial sector reforms have been implemented, beginning in April 1998, and the financial services markets are now deregulated. Each of the main banks used to be part of an industrial group, and there was extensive cross-

⁶ See Lambert (2001) for a more extensive discussion.

shareholding and other close relationships with the business community. These tight relationships among firms are starting to change as the banking sector changes.⁷

Shareholders have traditionally had a weak position in Japan. Most large Japanese firms have a core group of institutional shareholders who own large blocks of shares and are involved in cross-shareholding relationships, which means that firm-management is in a very secure position. Again, changes are underway, but so far the Japanese large business model is largely intact.

In some ways the power of the state is more limited in Japan than in other OECD countries. Taxation as a share of GDP is low, and government employment is only 6 per cent of total employment.⁸ Although the public sector is thus rather small relative to GDP, Japan is a highly regulated society, with extensive government intervention via laws and licensing, and through extra-official guidance. The agricultural sector is also under strict state control. It receives staggering subsidies, equivalent to 64 per cent of the value of production.

Japan's economic strategy has been highly producer oriented, with lifetime employment as an important part of the social contract. But in the new situation with high unemployment Japan lack an appropriate welfare system the can deal with the unemployed. Schaede (2004) argues that there is now a need for a new social contract more oriented towards the citizens.

⁷ A special problem is the postal banking system, the world's largest financial institution with assets of US\$2.5 trillion. Koizumi wants to privatise it, but there is considerable opposition in his own party.

⁸ In addition there are a lot of public corporations and semi-government agencies, though.

The Japanese political economy is known for its vagueness and diffuse responsibility structures. Lambert (2001) notes that a measure of ambiguity has allowed for smoother, more harmonious relations, which has been the Japanese trademark. The current wave of deregulation and reform has started to change all this,⁹ but so far changes have been limited. Increased transparency and improved administrative responsibility are certainly on the agenda in Japan, but the vested interests opposing change in the current structure are very strong.

8. MONETARY POLICY LESSONS

The Japanese experience with deflation is possibly the most dramatic one since the 1930s, and it has therefore been much debated. One general conclusion is that monetary policy should prevent inflation from ever approaching 0 per cent; in other words, the zero-inflation “ideal” is far from ideal. The Bank of Japan should thus have pursued more aggressive monetary policies already in the early 1990s. It should not have tried to deny the negative effects of deflation. It now says its aim is to have inflation above 0 per cent, but it should aim higher, maybe for 2 per cent. Prices have fallen by at least 5 per cent the last five years. The US Fed seems to have learned this lesson, and has been very aggressive in recent years in cutting interest rates. If prices actually start to decline, the central bank should do everything possible to reverse the decline.

⁹ For example, the reforms have made the *amakudari* post-retirement system for top bureaucrats less viable, whereby top officials got top jobs in the private sector after early retirement from their government jobs (Lambert, 2001).

Lessons learned with regard to monetary policy include:¹⁰

- 1) A country's inflation-target must leave an adequate cushion – at least 1 per cent.
- 2) Monetary policy must be more aggressive when the country is below the inflation target than when it is above. There should thus be a non-linear reaction function. To work, this must also be well understood by the market.
- 3) Quantitative easing, such as the purchase of non-traditional assets and exchange-rate interventions, cannot be expected to work unless they affect economic agents' views about the future path of the interest rates. They must be convinced that interest will stay low for a long time. The central bank should thus accept that inflation will be above the target ceiling for an extended period after deflation has been reversed.

9. POLICY CONCLUSIONS

Japan needs to get out of deflation. The government should try to create expectations of increased inflation, which would make real interest rates (nominal interest rates minus expected inflation) negative, and give the economy enough stimulus for growth to recover. Apart from pushing short-term interest rates to zero, the government should start to push down the long-term interest rate by buying government long-term bonds, and to stabilise the exchange rate. The government can also affect asset prices by buying corporate bonds and other marketable financial instruments. The Bank of Japan should also try to bring about currency depreciation by buying foreign assets. The government

¹⁰ According to a speech by Janet Yellen at the annual conference of the Japanese Economic Association in Tokyo in October 2003.

can combine fiscal stimulus measures with monetary ones to the extent that this is feasible given concerns about future solvency.

It also makes sense to speed up structural reforms of the Japanese economy. The specific ingredients of the Japanese model that need reforms include labour market structure and industrial relations, financial structures, and the industrial conglomerates. The structure may earlier have given Japan considerable advantage, but it is quite likely that it has outlived its usefulness. The world economy is now changing rapidly. To keep up with the other leading economies, Japan needs to be able to adjust more rapidly than before.

10. FUTURE PROSPECTS FOR THE JAPANESE ECONOMY

The situation looks difficult in the short term, but Japan certainly will maintain its high economic standard. The country has strengths in its physical capital stock, high education levels, and advanced research and development, with many firms at the global technological frontier. Japan has a fairly even income distribution and unparalleled social stability. Sooner or later it will get out of the liquidity trap and move towards macroeconomic balance. It will then have to service a huge public debt, however, which will put extra demands on the economy. The debt may in itself be an incentive for increased inflation (see discussion in Eggertsson and Woodford, 2003).

The interesting question is where this all will take the country. It seems possible that the structural problems discussed above will prevent a return to pre-1990 growth rates. Since Japan has now reached the international technology frontier, it is much harder than before

to maintain exceptional growth rates. There are also demographic factors working against rapid future growth.

Japan is trying to increase the flexibility of the economic system by deregulation and market reforms. If the country succeeds with these reforms at the same time as it manages to maintain the social discipline of the old system, the economy should be able to make a comeback. But even so, growth rates will in the future probably not be higher than those in the West.

REFERENCES

- Clouse, J., D. Henderson, A. Orphanides, D. Small, and P. Tinsley (2003), “Monetary Policy When the Nominal Short-term Interest Rate is Zero”, *Topics in Macroeconomics* 3(1):Article 12.
- Eggertsson, G.B. and M. Woodford (2003), “Optimal Monetary Policy in a Liquidity Trap”, Working Paper no 9968, NBER, Cambridge, Mass.
- Fukao, M. (2003), “Japan’s Lost Decade and Its Financial System”, *The World Economy* 26(3):365-84.
- Goodfriend, M. (2000), “Overcoming the Zero Bound on Interest Rate Policy”, *Journal of Money, Credit and Banking* 32:1007-35.
- Goyal, R. and R. McKinnon (2003), “Japan’s Negative Risk Premium in Interest Rates: The Liquidity Trap and the Fall in Bank Lending”, *The World Economy* 26(3):339-63.
- Hoshi, T. and A.K. Kashyap (2004), “Japan’s Financial Crisis and Economic Stagnation”, *Journal of Economic Perspectives* 18(1):3-26.
- Ihori, T., T. Nakazato and M. Kawade (2003), “Japan’s Fiscal Policies in the 1990s”, *The World Economy* 26(3):325-38.
- Ito, T. (2003), “Retrospective on the Bubble Period and its Relationship to Development in the 1990s”, *The World Economy* 26(3):283-300.

- Krugman, P. (1998), "It's Back: Japan's Slump and the Return of the Liquidity Trap", *Brookings Papers on Economic Activity* 2:137-205.
- Krugman, P. (2000), "Thinking About the Liquidity Trap", *Journal of Japanese and International Economics* 14:221-37.
- Lambert, B.H. (2001), "The Economy of Japan Today: An Overview", Working Paper No. 128, European Institute of Japanese Studies, Stockholm School of Economics, Stockholm.
- McKibbin, W. and P. Wilcoxon (1998), "The Theoretical and Empirical Structures of the G-Cubed Model", *Economic Modelling* 16:123-48.
- McNelis, P.D. and N. Yoshino (2004) "Deciphering the Message in Japanese Inflation Dynamics", mimeo, Georgetown University.
- Morana, C. (2004), The Japanese stagnation: an assessment of the productivity slowdown hypothesis", *Japan and the World Economy* 16(2):193-211.
- Nishimura, K.G. and Y. Kawamoto (2003), "Why Does the Problem Persist? 'Rational Rigidity' and the Plight of Japanese Banks", *The World Economy* 26(3):301-24.
- Porter, M.E. and M. Sakakibara (2004), "Competition in Japan", *Journal of Economic Perspectives* 18(1):27-50.
- Saxonhouse, G.R. and R.M. Stern (2003), "The Bubble and the Lost Decade", *The World Economy* 26(3):267-81.

Schaede, U. (2004), “What Happened to the Japanese Model?”, *Review of International Economics* 12(2):277-94.

Svensson, L.E.O. (2003), “Escaping from a Liquidity Trap and Deflation: The foolproof way and others”, *Journal of Economic Perspectives* 17(4):145-66.

Yoshino, N. and E. Sakakibara (2002), “The Current State of the Japanese Economy and Remedies”, *Asian Economic Papers* 1:110-26.

Abstract: Since the beginning of the 1990s Japan has experienced economic stagnation. The economy had been allowed to overheat in the 1980s and a bubble had been built up. When this burst, there was massive asset-deflation, which led to a banking crisis. The bad debts were not faced up to effectively. Japanese banks could not achieve high enough margins to recapitalise themselves, and the government was for a long time reluctant to intervene effectively. The shock made economic agents more pessimistic, which led to an imbalance between savings and investment-demand. Excess savings was placed abroad and was used to finance a domestic fiscal deficit, but this was not enough to close the gap and sustain growth. To be able to run a large current account surplus the yen needed to depreciate, but this was not achieved due to expectations about a future appreciation.

The strategy to get out of the liquidity trap would include credible inflation targeting and yen depreciation. Monetary policy should have an inflation target well above zero per cent. Such macroeconomic measures need to be complemented by structural reforms such as deregulation of financial services, competition policy, and reallocation of public investments. The Japanese development model with close connections between firms and banks needs to be reformed.

Japan should be able to achieve stable growth again, but since the catch-up phase is over one would not expect growth in Japan to be higher than in other developed countries, even if Japan undertakes the needed reforms.